



Showcasing an Innovative Activity

From Scattergories to Categories: Toward a Common Language for JPL Information

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JPL LIBRARY, ARCHIVES, AND RECORDS SECTION



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Inspiration: The Crux of the Issue

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The High Cost of Not Finding Information

An IDC White Paper

Analysts: Susan Feldman and Chris Sherman

Information: The Lifeblood of the Enterprise

Timely access to critical information separates the winners from the losers in today's information economy. Yet all too often knowledge workers fail in their quest to obtain the information they need. There are many reasons for this failure — some technical, some cultural, and some personal. No matter the cause, the amount of time wasted in futile searching for vital information is enormous, leading to staggering costs to the enterprise.

- ❖ Problem remains unsolved— if anything, it's gotten worse

Driving Forces: JPL 2025

“In ten years’ time, our physical workplaces may look much the same, but *our ability to access and benefit from information will make us orders of magnitude more powerful and productive.*”

From JPL 2025, Thrust 01 | Creating the Workplace of the Future



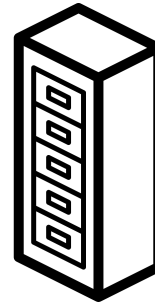
How do we foster an effective information ecosystem?

GOAL | Creating a common language for both JPLers and JPL digital systems, so that information can be reused and aggregated for exponentially more knowledge.

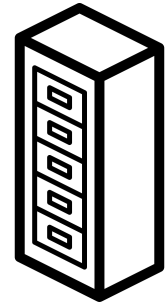
Information Management: Present

Digital system, based on:

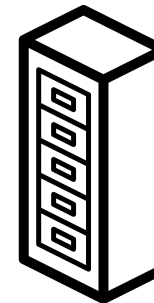
- ❖ Diverse file types
- ❖ Multiple (siloed) repositories
- ❖ Individual user permissions
- ❖ (Unified) Search



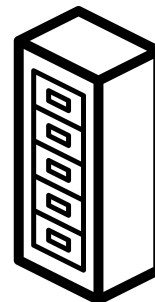
DocuShare



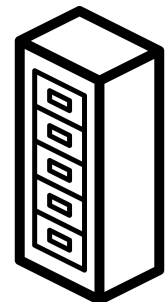
Wired



SharePoint



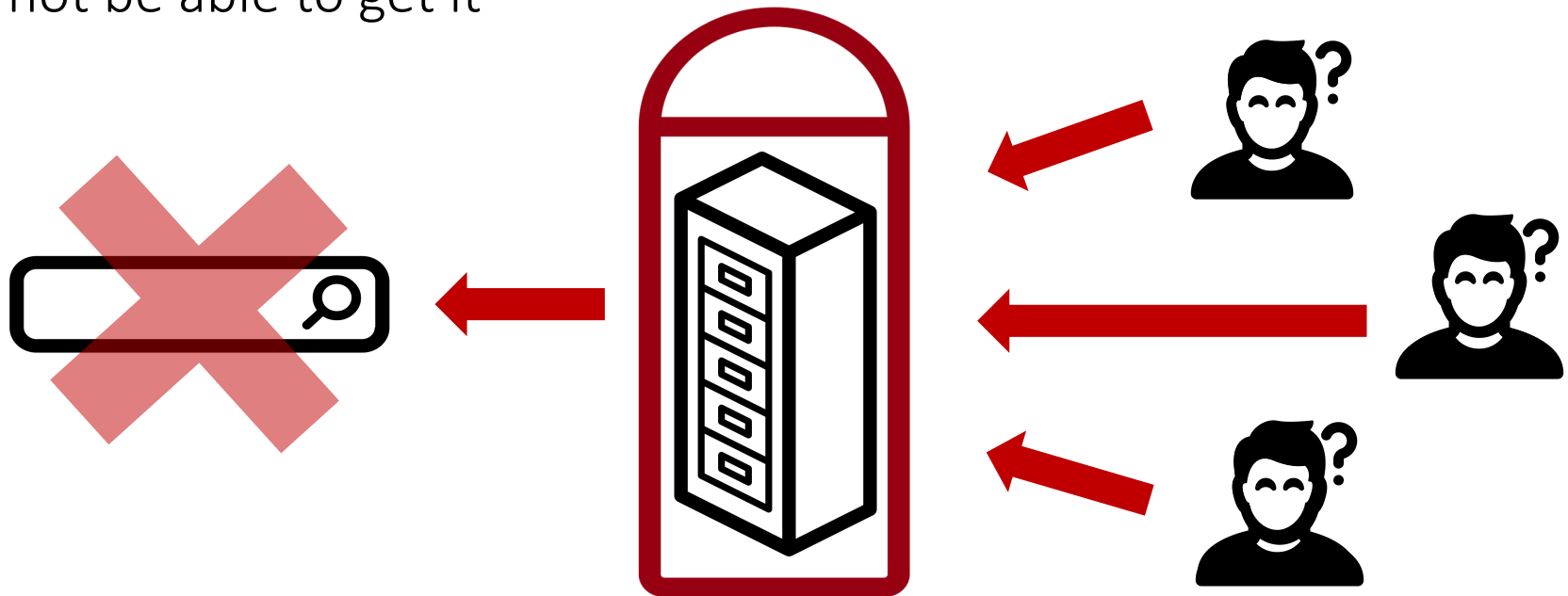
EPDM



JPL Spark

Summary of the Challenge

- ❖ “Siloization” makes unified search and retrieval nearly impossible without search engine optimization (SEO)
- ❖ Individual user permissions: the JPLer that needs access may not be able to get it



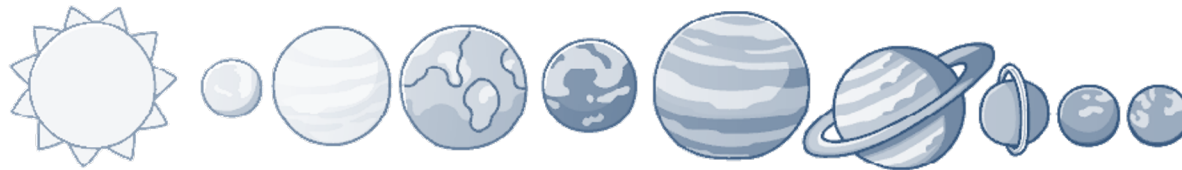
Tools of the Trade

- ❖ **Metadata**

Descriptive labels and common language mapping


- ❖ **Controlled vocabulary / Taxonomy**

Digital dictionaries that systems and users can understand when storing and looking for content




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Example: Metadata and Taxonomy




Try Prime

All ▾ telescope 

Father's D

subject taxonomies ▾

Your Amazon.com Today's Deals Gift Cards Registry Sell Treasure Truck Help

EN  Hello. Sign in Account & Lists ▾

Camera & Photo

- Telescopes
- Telescope Refractors
- Telescope Reflectors
- Catadioptric Telescopes
- Binoculars, Telescopes & Optics
- Monoculars
- Telescope Eyepieces
- Telescope Photo Adapters

Toys & Games

- Kids' Telescopes
- Nature Exploration Toys
- Kids' Telescope Accessories

BOOKS


- Astronomy
- Star-Gazing
- Children's Astronomy Books
- Children's Aeronautics & Space Books
- Children's Science & Nature Books

Sports & Fitness

- Spotting Scopes
- Night Vision Monoculars

Showing most relevant results. See all results for telescope.


standard metadata





Electronics Gift Guide

Sponsored ⓘ

Celestron 21035 70mm Travel Scope **item**

\$77³² **price** 
Get it by **Friday, Jun 8**
FREE Shipping on eligible orders


 1,220
Product Features
... The telescope and tripod fit




Sponsored ⓘ

Monocular Telescope, Pajuva High Power Monocular Scope Waterproof Monoculars with Phone for Bird Watching (Black Upgrade) **item**

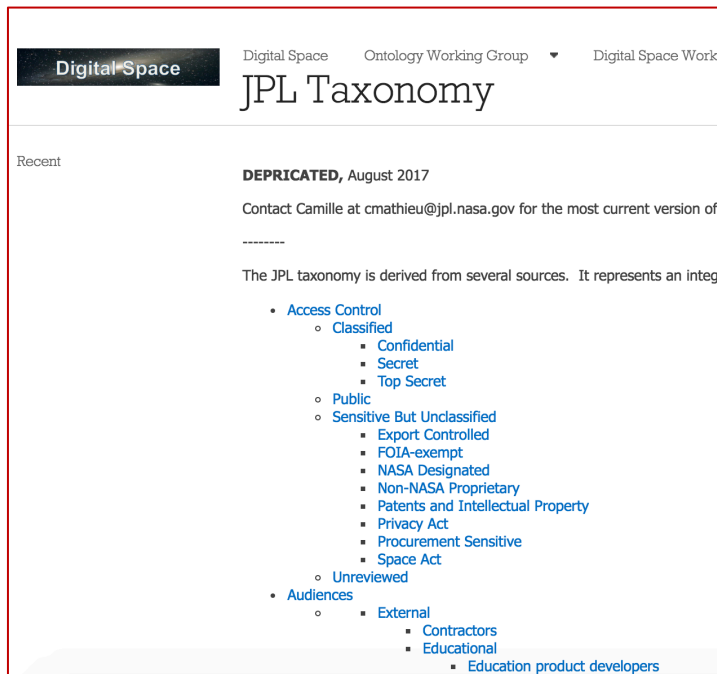
by Pajuva

\$39⁹⁹ **price** 
Get it by **Friday, Jun 8**
FREE Shipping on eligible orders

 ~ 100

JPL Taxonomy

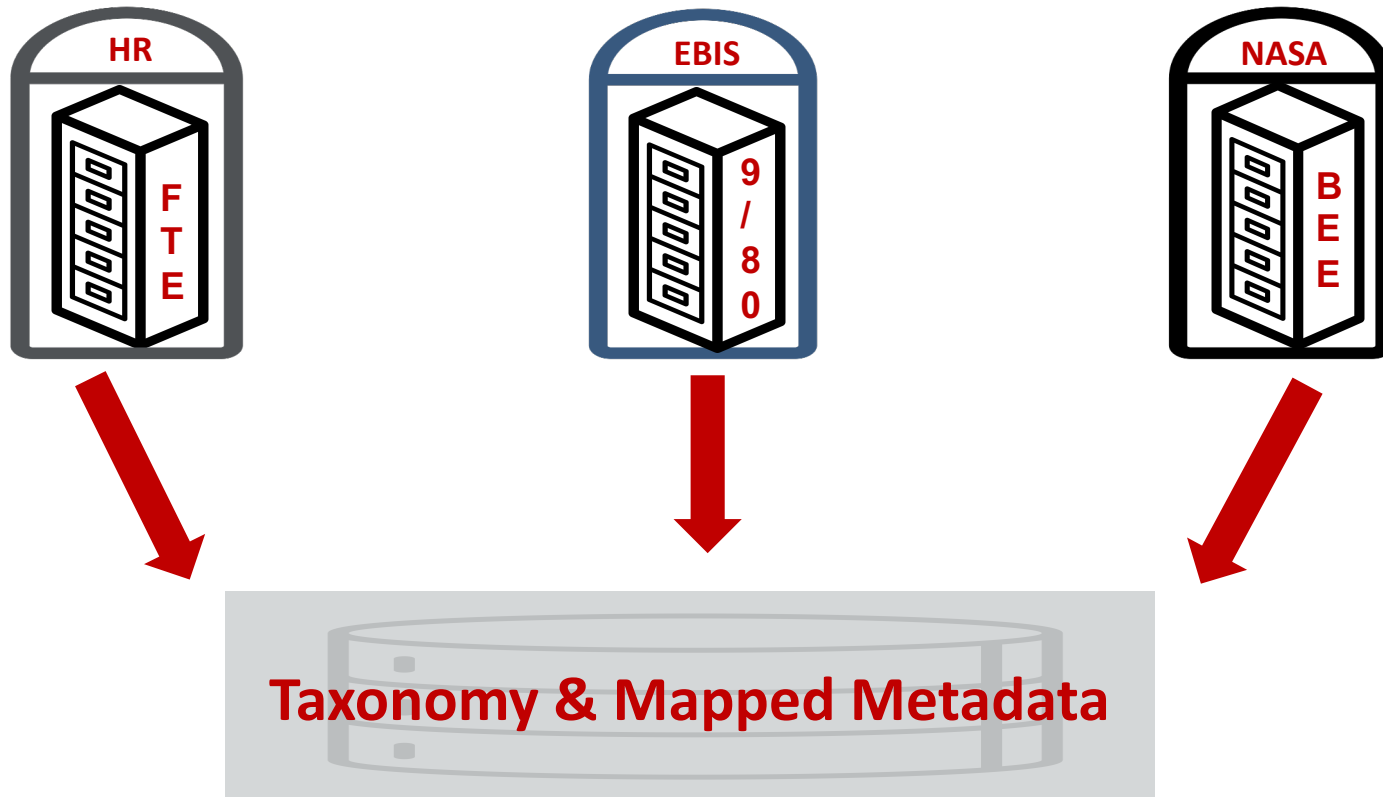
- ❖ Foundational effort towards a common language
- ❖ Effort began in early 2000s; revived in 2015
- ❖ Currently hosted in PoolParty, with applications for TechConnect and JPL Space Search



**Current efforts using
Taxonomy & Mapped Metadata:**



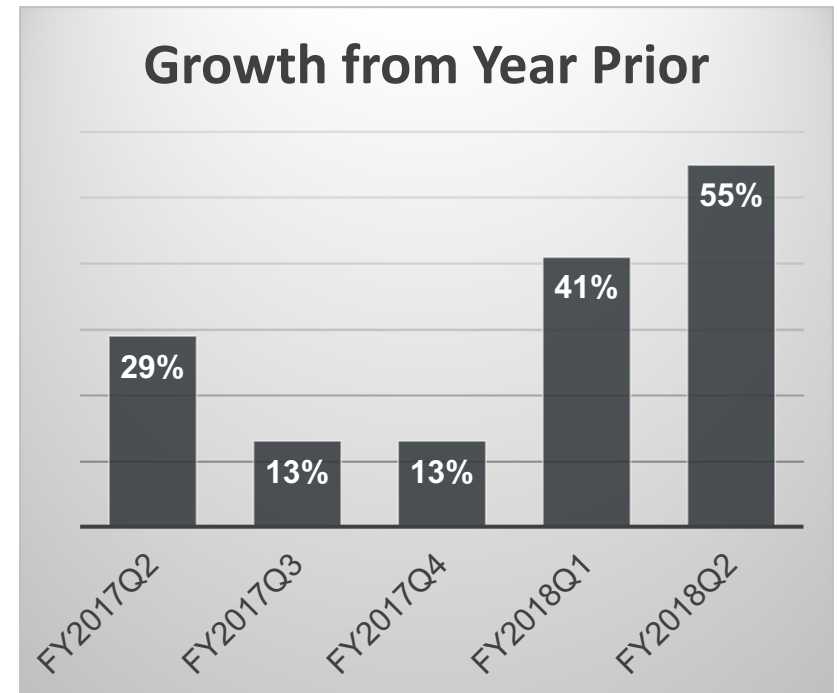
Vision: Taxonomy + Metadata at JPL



 **Common Language
for JPL Information** 

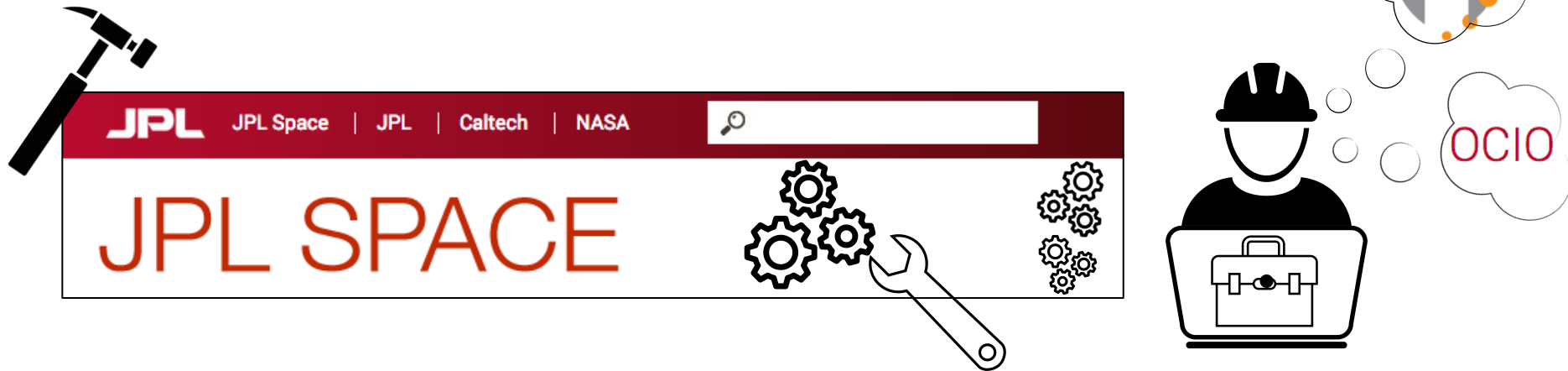
JPL Effort: Wired

- ❖ JPL's Wikipedia
- ❖ In conjunction with **Digital Transformation** and **3x** partners
- ❖ Supports building Communities of Practice (though not accessible to Foreign Nationals)
- ❖ Wired organization is leveraged for JPL Taxonomy
- ❖ Since beginning library-curated Wired efforts, Wired content has grown



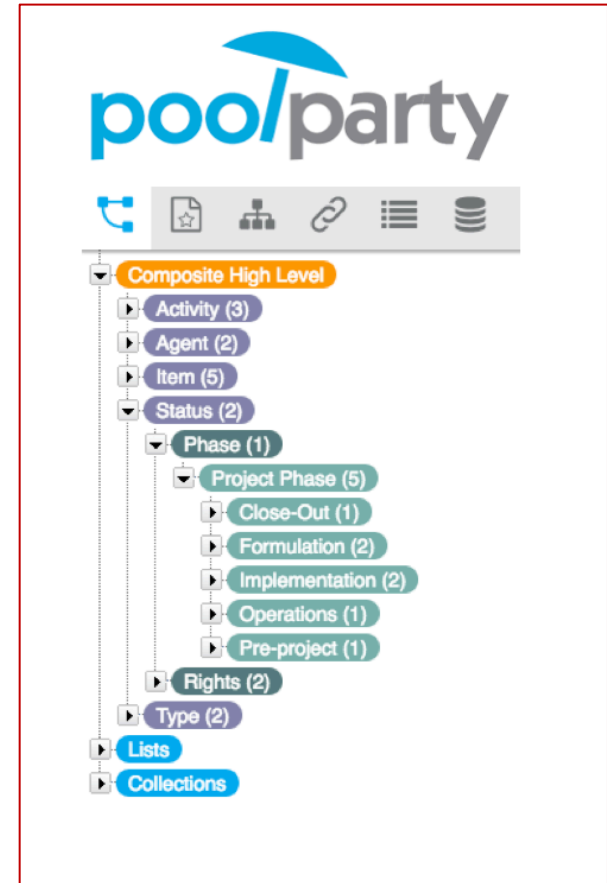
JPL Effort: Search Curation

- ❖ Partnership between JPL **Library** (2x) and **OCIO** (1x) to improve JPL Search
- ❖ As "silos" are indexed into JPL Space Search, metadata mappings can be established
- ❖ Implementation of the **Information Access Policy (DocID 78895)** should make finding relevant information less difficult for individual users

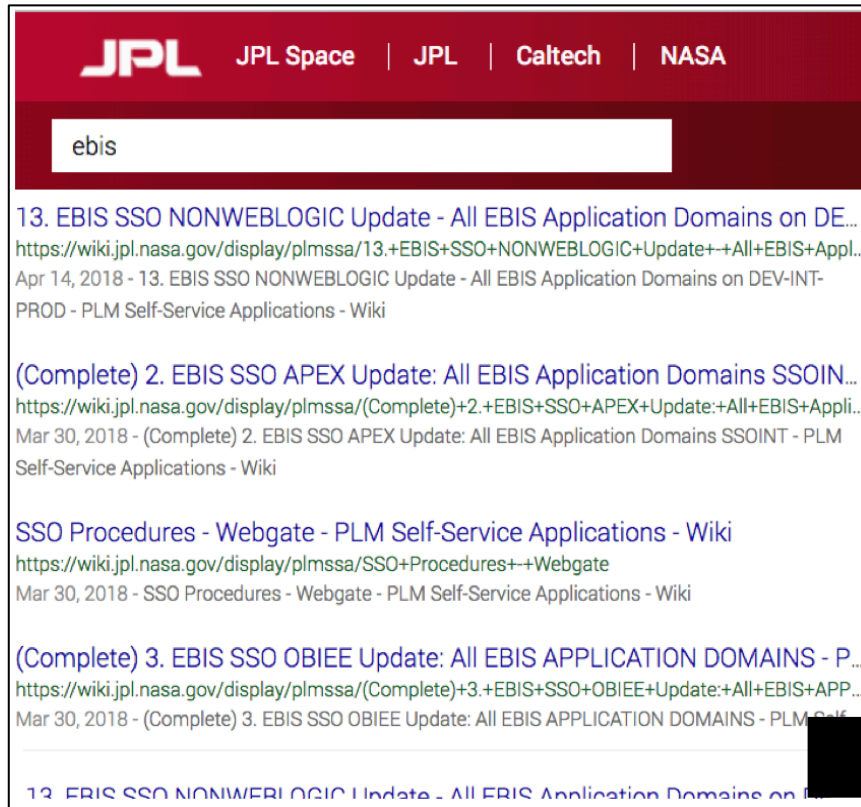


JPL Effort: Ontology Development

- ❖ **Ontology**
Non-hierarchical relationships between concepts; built on metadata and taxonomy
- ❖ Work done by the **Ontology Working Group** (1x, 2x, 3x) will provide “best guess” and predictive results to users

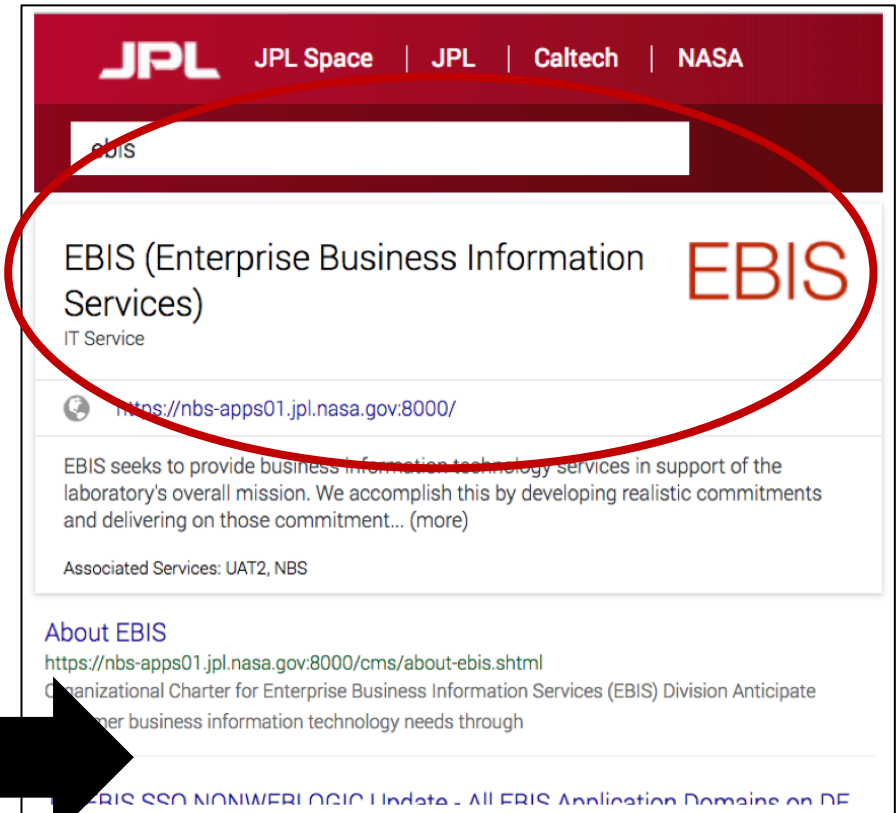


Taxonomy + Metadata = SEO



The screenshot shows the JPL website header with navigation links: JPL Space | JPL | Caltech | NASA. A search bar contains the text 'ebis'. Below the search bar, a list of search results is displayed. The first result is titled '13. EBIS SSO NONWEBLOGIC Update - All EBIS Application Domains on DE...' and includes a URL and a date. The second result is titled '(Complete) 2. EBIS SSO APEX Update: All EBIS Application Domains SSOIN...' and includes a URL and a date. The third result is titled 'SSO Procedures - Webgate - PLM Self-Service Applications - Wiki' and includes a URL and a date. The fourth result is titled '(Complete) 3. EBIS SSO OBIEE Update: All EBIS APPLICATION DOMAINS - P...' and includes a URL and a date. A large black arrow points from this screenshot to the 'AFTER CURATION' screenshot.

BEFORE CURATION



The screenshot shows the JPL website header with navigation links: JPL Space | JPL | Caltech | NASA. A search bar contains the text 'ebis'. Below the search bar, a single search result is displayed. The result is titled 'EBIS (Enterprise Business Information Services)' and includes the text 'IT Service'. To the right of the title is a large red 'EBIS' logo. Below the title is a URL: <https://nbs-apps01.jpl.nasa.gov:8000/>. Below the URL is a paragraph of text: 'EBIS seeks to provide business information technology services in support of the laboratory's overall mission. We accomplish this by developing realistic commitments and delivering on those commitment... (more)'. Below the paragraph is the text 'Associated Services: UAT2, NBS'. Below the text is a section titled 'About EBIS' with a URL: <https://nbs-apps01.jpl.nasa.gov:8000/cms/about-ebis.shtml>. Below the URL is a paragraph of text: 'Organizational Charter for Enterprise Business Information Services (EBIS) Division Anticipate...'. A large red oval highlights the search bar, the title, the URL, and the paragraph of text.

AFTER CURATION

The Workplace of 2025

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How do we foster an effective information ecosystem?

- ❖ Break down silos with metadata/taxonomy
- ❖ Inspire high confidence with manual search curation and search engine optimization
- ❖ Partnering people with technologies – Digital Transformation
- ❖ Emphasizing ***how we do it*** alongside ***what we do***